



# UNITED STATES PATENT AND TRADEMARK OFFICE

JW

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/725,840	12/01/2003	Alexei Glebov	02EK-105597	3228
30764	7590	05/04/2005		EXAMINER
SHEPPARD, MULLIN, RICHTER & HAMPTON LLP			MACK, RICKY LEVERN	
333 SOUTH HOPE STREET			ART UNIT	PAPER NUMBER
48TH FLOOR				
LOS ANGELES, CA 90071-1448			2873	

DATE MAILED: 05/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/725,840	GLEBOV ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Ricky L. Mack	2873	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

**A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) FROM  
 THE MAILING DATE OF THIS COMMUNICATION.**

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) 29 and 30 is/are withdrawn from consideration.
- 5) Claim(s) 1-28 is/are allowed.
- 6) Claim(s) \_\_\_\_\_ is/are rejected.
- 7) Claim(s) 1 and 27 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 01 December 2003 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
 Paper No(s)/Mail Date \_\_\_\_\_.
- 4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: Detailed Action.

## DETAILED ACTION

### *Election/Restrictions*

1. Applicant's election without traverse of Group I (claims 1-28) in the reply filed on 2/22/05 is acknowledged.
2. Claims 29 and 30 have been withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 2/22/05.

### *Drawings*

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description:

Some of the had written reference numbers are not clearly distinguishable.

Figure 1A does not include reference number "10" as disclosed on page 5, line 10 of the specification.

Reference number "20a" and "20b" are not found in the drawings.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Art Unit: 2873

***Claim Objections***

4. Claims 1 and 27 are objected to because of the following informalities:

In claim 1, applicant claims a first and second surface made of an optical material(s). The examiner suggest the claim be directed to the first and second optical elements or components since the surface deals more with the exterior than the interior/material.

Claim 27 is incomplete and includes “\*\*\*” where it appears a limitation should be. Since the specification page 7, lines 2 and 3, discloses that “*Suitable TO materials include acrylate monomers, amorphous fluorocarbon polymers, polystyrenes, polyimides, PMMA, FPE*”, the examiner acknowledges the disclosure. Withdrawal of this objection would occur with an amendment to claim 27 inserting the specific materials explicitly recited by applicant. In the case where there are acronyms, they should be expanded and no new matter should be entered.

Appropriate correction is required.

***Allowable Subject Matter***

5. Claims 1-28 are allowed.

6. The following is an examiner's statement of reasons for allowability: The prior art taken either singularly or in combination fails to anticipate or fairly suggest the limitations of the independent claim(s), in such a manner that a rejection under 35 U.S.C. 102 or 103 would be proper. The prior art fails to teach a combination of all the claimed features as presented in claim(s) 1-28, wherein the claimed invention comprises a first optical element, a second optical element with an index of refraction the same or different (embodiments) from the first optical element, the surface of the two optical element enclosing a gap for which a thermo-optical polymer having a index of refraction different from that of the first optical element is contained and a

Art Unit: 2873

temperature controller coupled to the polymer, as claimed. The combination of all the claimed features are not anticipated or made obvious by the prior art and all of said features are relied upon for a determination of allowability.

### *Conclusion*

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following references are cited for disclosing a thermo-optical material in an optical device, but these references do not disclose a first optical element, a second optical element with an index of refraction the same or different (embodiments) from the first optical element, the surface of the two optical element enclosing a gap for which a thermo-optical polymer having a index of refraction different from that of the first optical element is contained and a temperature controller coupled to the polymer, as claimed: LaMacchia (3765749), Baba et al. (4872743), Arriola (5737120), Wohlstadter (5986811), Hsiao et al. (6582988), Li (6587147), Fukuzawa (6563647) and Sidorin et al. (20030214700).

8. This application is in condition for allowance except for the following formal matters:

See items 3 and 4 above.

Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

Art Unit: 2873

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ricky L. Mack whose telephone number is (571) 272-2333. The examiner can normally be reached on Monday-Friday (6:30 AM to 4:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Georgia Y. Epps can be reached on (571) 272-2328. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Ricky L. Mack  
Primary Examiner  
Art Unit 2873

RM  
May 2, 2005